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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/777,604	02/11/2004	Yao-Ching Stephen Chen	SVL920030096US1/2962P	4627
29141	7590	07/18/2006	EXAMINER	
SAWYER LAW GROUP LLP P O BOX 51418 PALO ALTO, CA 94303			PANNALA, SATHYANARAYA R	
			ART UNIT	PAPER NUMBER
			2164	

DATE MAILED: 07/18/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/777,604

Applicant(s)

CHEN ET AL.

Examiner

Sathyanarayan Pannala

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 February 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-24 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>2/11/2004</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Application No. 10/777604 filed on 2/11/2004 has been examined. In this Office Action, claims 1-24 are pending.

Information Disclosure Statement

2. The information disclosure statement (IDS) submitted on 2/11/2004 is in compliance with the provisions of 37 CFR 1.97 and has been considered by the examiner.

Specification

3. The Abstract is objected, because the abstract is a copy of the Summary. Corrected abstract of the disclosure is required and must be presented on a separate sheet, apart from any other text. Applicant is reminded of the proper content of an abstract of the disclosure.

A patent abstract is a concise statement of the technical disclosure of the patent and should include that which is new in the art to which the invention pertains. If the patent is of a basic nature, the entire technical disclosure may be new in the art, and the abstract should be directed to the entire disclosure. If the patent is in the nature of an improvement in an old apparatus, process, product, or composition, the abstract should include the technical disclosure of the improvement. In certain patents, particularly

those for compounds and compositions, wherein the process for making and/or the use thereof are not obvious, the abstract should set forth a process for making and/or use thereof. If the new technical disclosure involves modifications or alternatives, the abstract should mention by way of example the preferred modification or alternative. The abstract should not refer to purported merits or speculative applications of the invention and should not compare the invention with the prior art.

Claim Rejections - 35 USC § 101

4. 35 U.S.C. § 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

5. Claims 1-24 are rejected under 35 U.S.C. § 101, because none of the claims are directed to statutory subject matter. Independent claims 1, 6, 9, 14, 17 and 22 deals with simple mathematical abstract ideas. A claim that recites a computer that solely calculates a mathematical formula or a computer disk that solely stores a mathematical formula is not directed to the type of subject matter eligible for patent protection. See *Diehr*, 450 US at 186 and *Gottschalk v. Benson*, 409 U.S. 63, 71-72 (1972).

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

7. Claims 1-4, 9-12, 17-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yoshimura et al. (US Patent 6,882,994) hereinafter Yoshimura, and in view of Norcott et al. (US Patent 6,999,977) hereinafter Norcott.

8. As per independent claims 1, 9, 17, Yoshimura teaches a querying method in which a first data item is obtained from database management system database table in response to a query request (col. 2, lines 14-17). Yoshimura teaches the claimed, providing at least one table in the database system (col. 3, lines 26-28). Yoshimura

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does not teach hidden timestamp. However, Norcott teaches the claimed, providing a hidden timestamp column in the at least one table in the database system, wherein the hidden timestamp column indicates a last time a corresponding row in the at least one table was modified (Fig. 1, col. 5, lines 14-18). Thus, it would have been obvious to one of ordinary skill in the data processing art at the time of the invention, to have combined the teachings of the cited references because Norcott's teachings would have allowed Yoshimura's method to allow data extraction, transport and loading with techniques, which do not require schema changes, are robust and do not suffer from data loss or double counting problems (col. 2, lines 56-59).

9. As per dependent claims 2, 10, 18, Yoshimura does not teach hidden timestamp. However, Norcott teaches the claimed, receiving a query to obtain a timestamp value from the hidden timestamp column, wherein the query calls the timestamp column by name (col. 3, lines 40-42). Thus, it would have been obvious to one of ordinary skill in the data processing art at the time of the invention, to have combined the teachings of the cited references because Norcott's teachings would have allowed Yoshimura's method to allow data extraction, transport and loading with techniques, which do not require schema changes, are robust and do not suffer from data loss or double counting problems (col. 2, lines 56-59).

10. As per dependent claims 3, 11, 19, Yoshimura does not teach hidden timestamp. However, Norcott teaches the claimed, providing a page timestamp for a data page in

the database system, wherein the page timestamp indicates a last time at least one row of the data page was modified (col. 3, lines 40-42). Thus, it would have been obvious to one of ordinary skill in the data processing art at the time of the invention, to have combined the teachings of the cited references because Norcott's teachings would have allowed Yoshimura's method to allow data extraction, transport and loading with techniques, which do not require schema changes, are robust and do not suffer from data loss or double counting problems (col. 2, lines 56-59).

11. As per dependent claims 4, 12, 20, Yoshimura teaches the claimed, the page timestamp comprises an update timestamp for the data page recorded on disk or in a buffer pool (Fig. 9-10, col. 9, lines 62-64).

12. Claims 5, 13, 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yoshimura et al. (US Patent 6,882,994) hereinafter Yoshimura, in view of Norcott et al. (US Patent 6,999,977) hereinafter Norcott, and in view of Sockut et al. (US Patent 5,721,915) hereinafter Sockut.

13. As per dependent claims 5, 13, 21, Yoshimura teaches the timestamp. Yoshimura and Norcott do not explicitly teach log relative byte address. However, Sockut teaches the claimed, the page timestamp is converted from a log relative byte address associated with the last time at least one row of the data page was modified (Fig. 2, col. 6, lines 19-24). Thus, it would have been obvious to one of ordinary skill in

the data processing art at the time of the invention, to have combined the teachings of the cited references because Sockut's teachings would have allowed Yoshimura's method to provides the ability to reorganize databases using a combination of a log application with the use of a mapping table (col. 3, lines 55-58).

14. Claims 6-8, 14-16, 22-24, are rejected under 35 U.S.C. 103(a) as being unpatentable over Sockut et al. (US Patent 5,721,915) hereinafter Sockut, and in view of Yoshimura et al. (US Patent 6,882,994) hereinafter Yoshimura.

15. As per independent claims 6, 14, 22, Sockut teaches a method providing at least one data page in the database system, the at least one data page comprising a plurality of rows of data (Fig. 2, col. 6, lines 3-6). Sockut teaches the claimed, providing a page timestamp for the at least one data page, wherein the page timestamp indicates a last time at least one of the plurality of rows was modified (Fig. 2, col. 6, lines 19-24). Sockut does not teach explicitly timestamp. However, Yoshimura teaches "timestamp" (col. 3, lines 40-42). Thus, it would have been obvious to one of ordinary skill in the data processing art at the time of the invention, to have combined the teachings of the cited references because Yoshimura's teachings would have allowed Sockut's method to provides the access to the timestamp of updated data and to be able to have such updated data processed to be used conveniently according to a company's business rules (col. 2, lines 4-7).

16. As per dependent claims 7, 15, 23, Sockut does not teach explicitly timestamp. However, Yoshimura teaches the claimed, the page timestamp comprises an update timestamp for the at least one data page recorded on disk or in a buffer pool (Fig. 9-10, col. 9, lines 62-64). Thus, it would have been obvious to one of ordinary skill in the data processing art at the time of the invention, to have combined the teachings of the cited references because Yoshimura's teachings would have allowed Sockut's method to provides the access to the timestamp of updated data and to be able to have such updated data processed to be used conveniently according to a company's business rules (col. 2, lines 4-7).


17. As per dependent claims 8, 16, 24, Sockut does not teach explicitly timestamp. However, Yoshimura teaches "timestamp". Thus, it would have been obvious to one of ordinary skill in the data processing art at the time of the invention, to have combined the teachings of the cited references because Yoshimura's teachings would have allowed Sockut's method to provides the access to the timestamp of updated data and to be able to have such updated data processed to be used conveniently according to a company's business rules (col. 2, lines 4-7).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sathyanarayan Pannala whose telephone number is (571) 272-4115. The examiner can normally be reached on 8:00 am - 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Charles Rones can be reached on (571) 272-4085. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


Sathyanarayan Pannala
Examiner
Art Unit 2164

srp
July 6, 2006